A NEW COMBINATION IN HEMIZONIA (ASTERACEAE: MADIINAE)

David J. Keil

Biological Sciences Department, California Polytechnic State University, San Luis Obispo, California 93407 U.S.A.

ABSTRACT

Hemizonia leucocephala Tanowitz is reduced to subspecific rank as H. congesta DC. ssp. leucocephala (Tanowitz) Keil.

KEY WORDS: Hemizonia, Asteraceae, Madiinae

Based on examination of types and a review of the application of names. Tanowitz (1983) recognized that the taxon that had been treated in recent floras as *Hemizonia multicaulis* Hook. & Arn. should properly be called *H. congesta* DC., and the taxon that had been treated as *H. congesta* (sensu stricto) has actually never been named. Tanowitz therefore described the latter taxon as *H. leucocephala* Tanowitz.

Members of the Hemizonia congesta complex have been treated by Babcock & Hall (1924) as one variable species with six subspecies and by Clausen (1951) and Keck (1958, 1959, 1960) as seven species. Babcock & Hall presented strong evidence that these taxa are all more of less interfertile and that intergradation in nature is common where ranges overlap. Clausen (1951) presented a crossing polygon that confirmed that these taxa are weakly to moderately interfertile in various combinations. Nevertheless, Clausen & Keck treated these plants as distinct species. I have been unable to document their rationale for recognition of these taxa at the species level.

In the Jepson Manual, I am following Babcock & Hall in treating these taxa as one polymorphic species. I recognize the same taxa that Babcock & Hall (1924) recognized. However, because of the nomenclatural changes that resulted from Tanowitz's (1983) study, application of names has changed for some taxa. I am treating as Hemizonia congesta ssp. congesta, the taxon that Babcock & Hall (1924) called H. congesta var. lutescens (E. Greene) Babcock & Hall, and that Keck (1959, 1960) split into H. lutescens (E. Greene) Keck, H. multicaulis Hook. & Arn., and H. multicaulis ssp. vernalis Keck. The taxon that Tanowitz treated as H. leucocephala has no name at the subspecific level. I therefore propose the following new combination:

Hemizonia congesta DC, ssp. leucocephala (Tanowitz) Keil, comb. nov. BASIONYM: Hemizonia leucocephala Tanowitz, Bull. Torrey Bot. Club 110:15, 1983.

ACKNOWLEDGMENTS

I thank Dr. Bruce G. Baldwin and Dr. Rhonda L. Riggins for reviewing this paper.

LITERATURE CITED

- Babcock, E.B. & H.M. Hall. 1924. Hemizonia congesta, a genetic, ecologic, and taxonomic study of the hayfield tarweeds. Univ. California Publ. Bot. 13:15-88.
- Clausen, J. 1951. Stages in the Evolution of Plant Species. Cornell University Press, Ithaca, New York.
- Keck, D.D. 1958. Taxonomic notes on the California flora. Aliso 4:101-114.
- Keck, A California Flora. University of California Press, Berkeley, California.
- ___. 1960. Hemizonia Pp. 172-184 in L. Abrams & R.S. Ferris. Illustrated Flora of the Pacific States, Washington, Oregon, and California. IV. Bignoniaceae to Compositae, bignonias to sunflowers. Stanford University Press, Stanford, California.
- Tanowitz, B.D. 1983. Taxonomic status of Hemizonia congesta DC. and Hemizonia corymbosa (DC.) T. & G. (Asteraceae: Madiinae). Bull. Torrey Bot. Club 110:12-17.